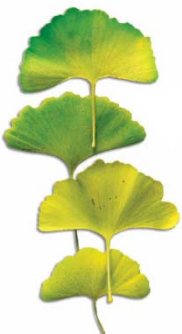


Chapter 7

Departures from
Standard Rational
Choice Models (With
and Without regret)

Chapter Outline

- Present-Aim and Self-Interest Standards of Rationality
- The Strategic Role of Preferences
- Tastes Not Only Can Differ, They Must Differ
- Bounded Rationality
- Affective Forecasting Errors
- Judgmental Heuristics and Biases
- Psychophysics of Perception
- The Self Control Pitfall



Two Definitions of Rationality

- ***Present-aim standard:*** a person is rational if she is efficient in the pursuit of whatever aims she happens to hold at the moment of action.
 - No attempt is made, under this standard, to assess whether her aims themselves make any sense.
- ***Self-interest standard:*** a person is rational if her motives are congruent with her narrow material interests.

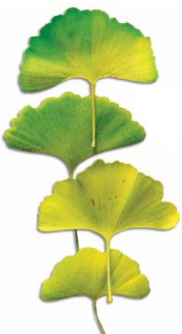


Figure 7.1: The Indifference Map for Franny, an Altruistic Person

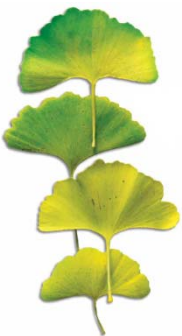
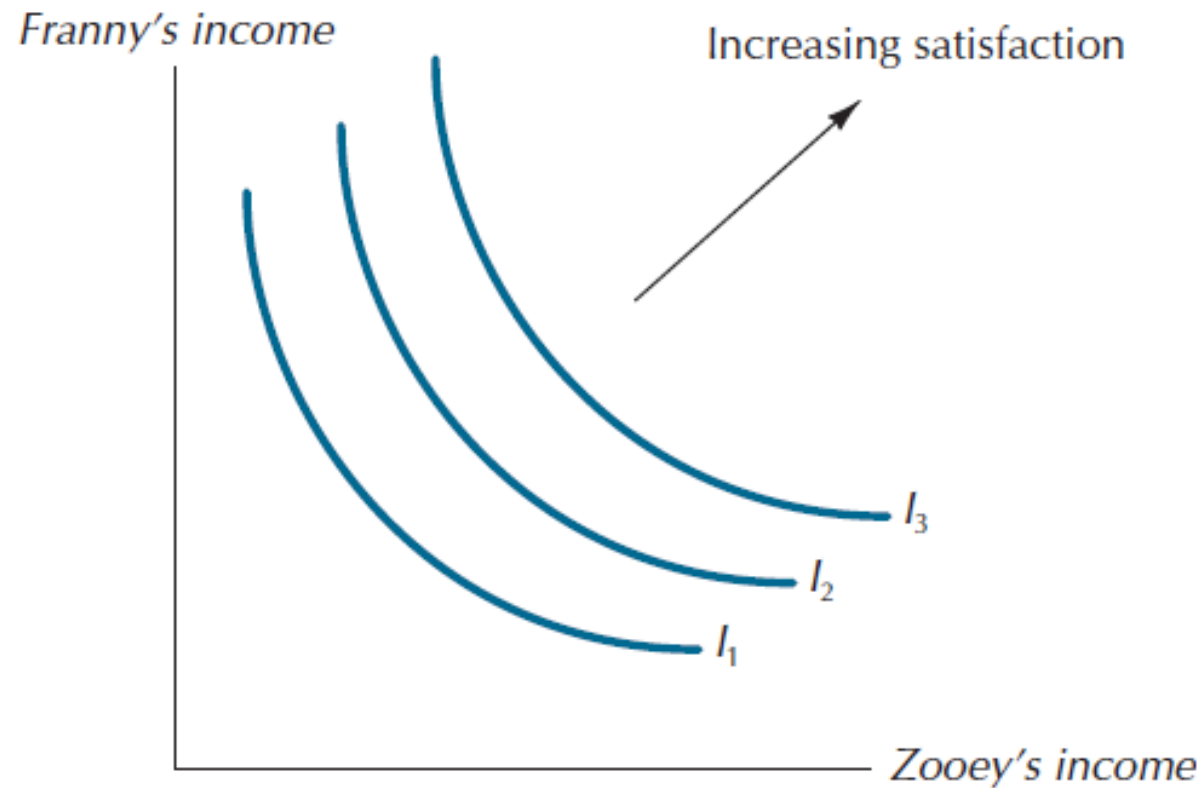


Figure 7.2: The Optimal Income Transfer from an Altruistic Person

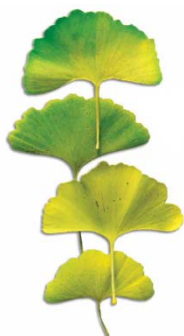
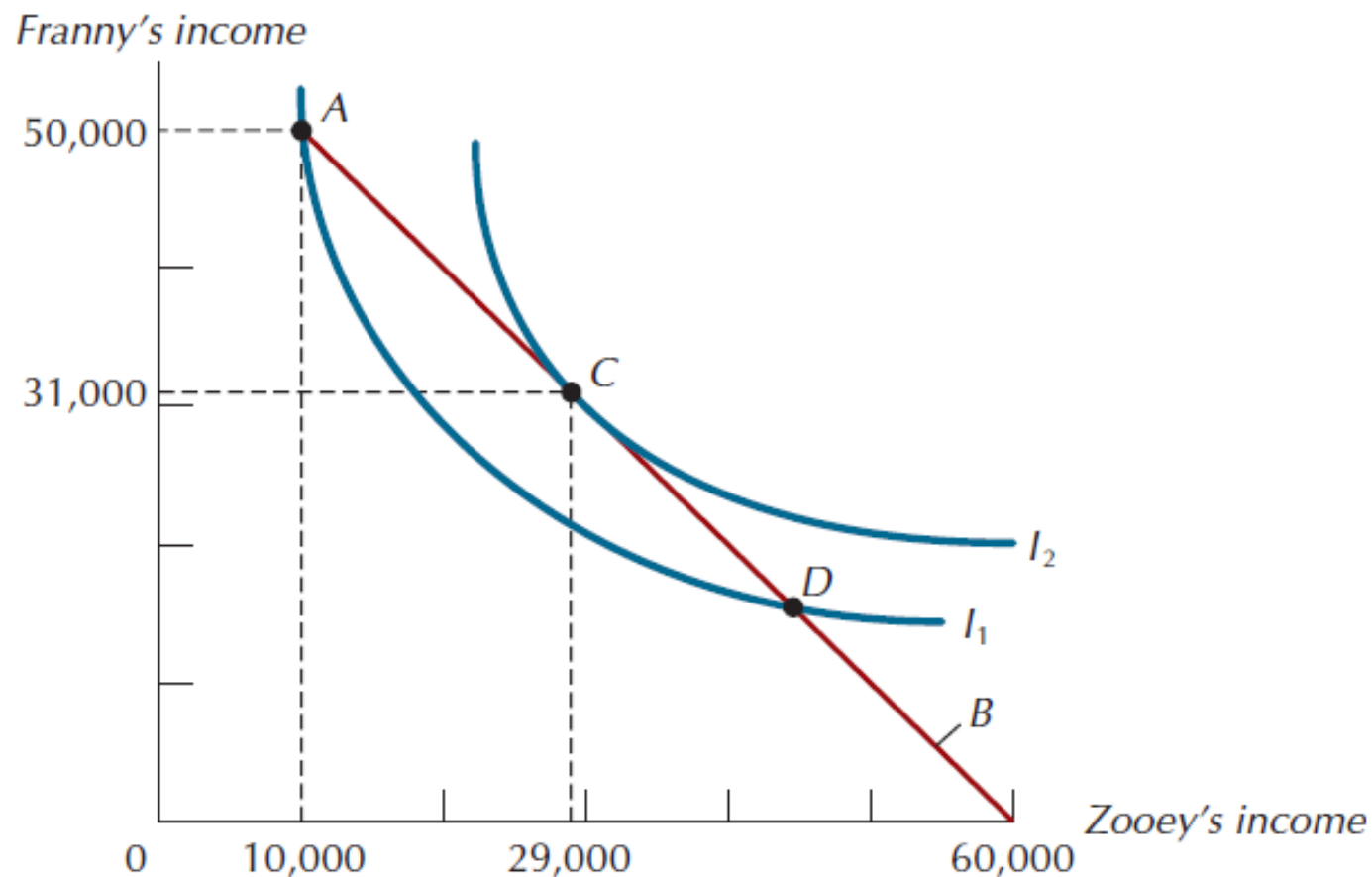


Figure 7.3: A Utility-Maximizing Altruist

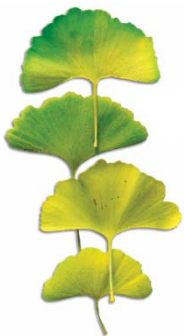
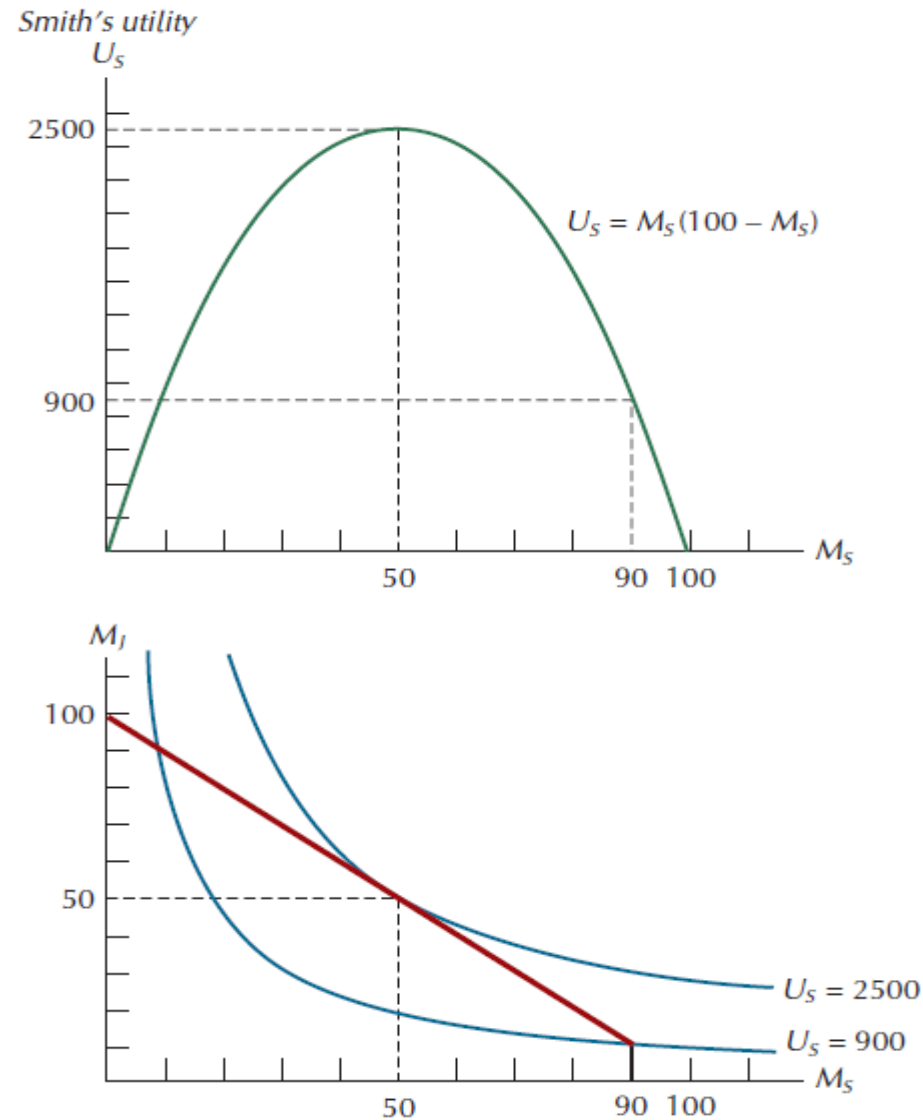
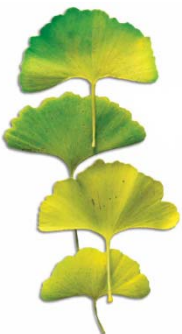
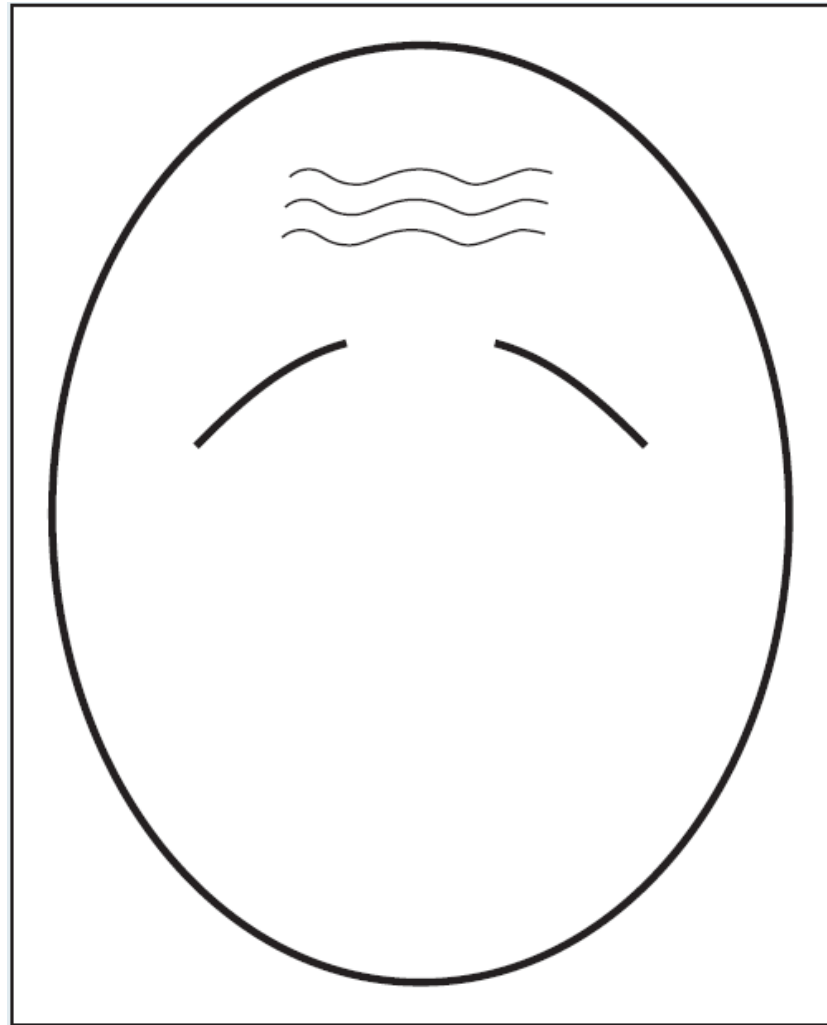


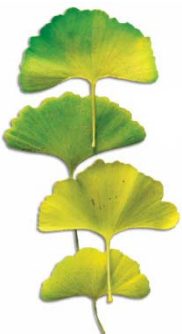
Figure 7.4: The Expression of Grief, Sadness, or Concern

Can these act as commitment devices to bring about better outcomes than what pure individual rationality would provide?



Two More Commitment Problems

- **The deterrence problem**
 - **Solution:** If people expect us to respond nonegoistically to the theft of our property, we will seldom need to because it will not be in their interests to steal it.
- **The bargaining problem**



Why Tastes Must Differ

- Because it is difficult to tell who is trustworthy and honest, a social group that is all trusting would provide an opportunity for scammers to thrive and more would become dishonest.
- However, if too many are scammers they cheat each other and lose out to the honest people who find each other. Thus a population will not be composed of only honest people or only scammers.

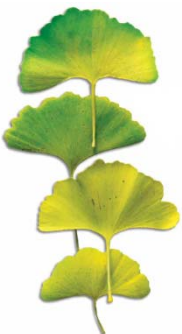


Figure 7.5: The Trade-off between Absolute Wealth and Relative Gain

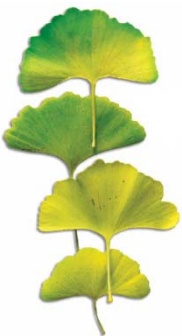
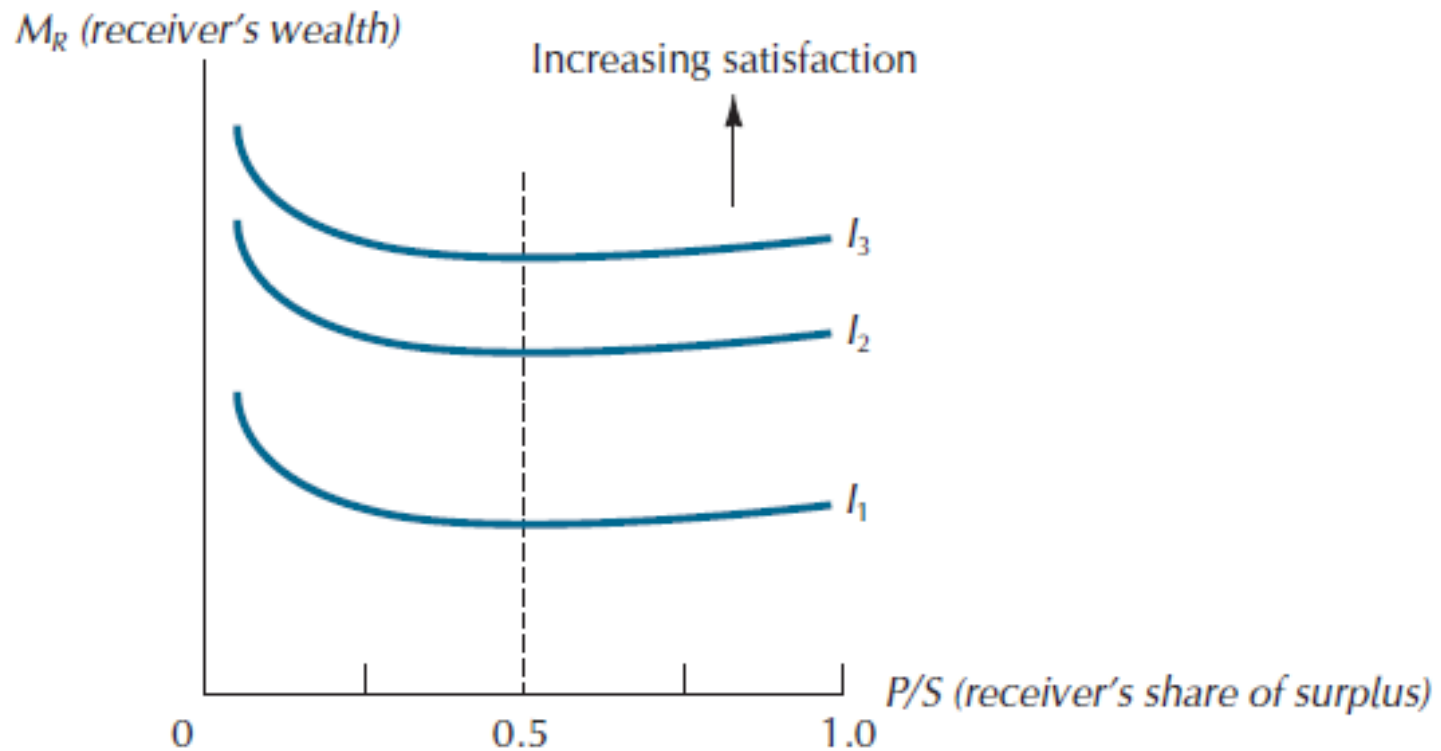
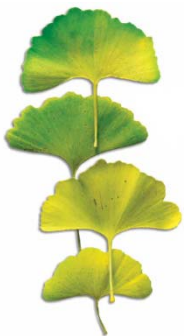
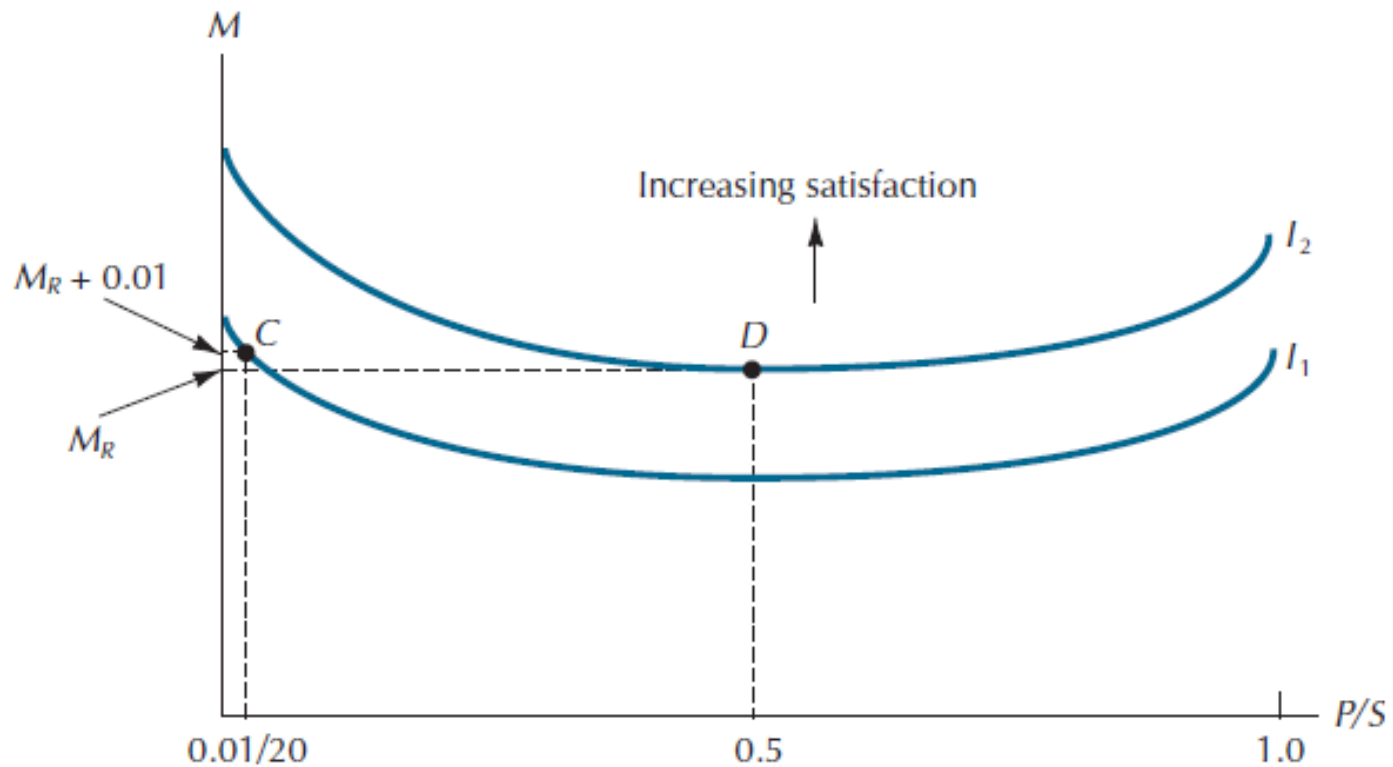


Figure 7.6: The Gain from Rejecting a One-Sided Offer



The Asymmetric Value Function

- Kahneman and Tversky
 - Proposed that people evaluate alternatives not with the conventional utility function, but instead with a *value function* that is defined over *changes* in wealth.
 - Value function is much steeper in losses than in gains.
 - People typically evaluate each item of a collection of events separately

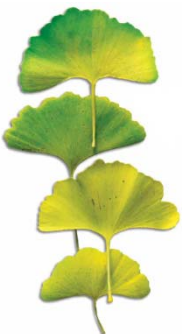
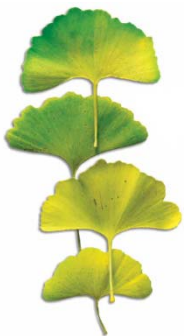
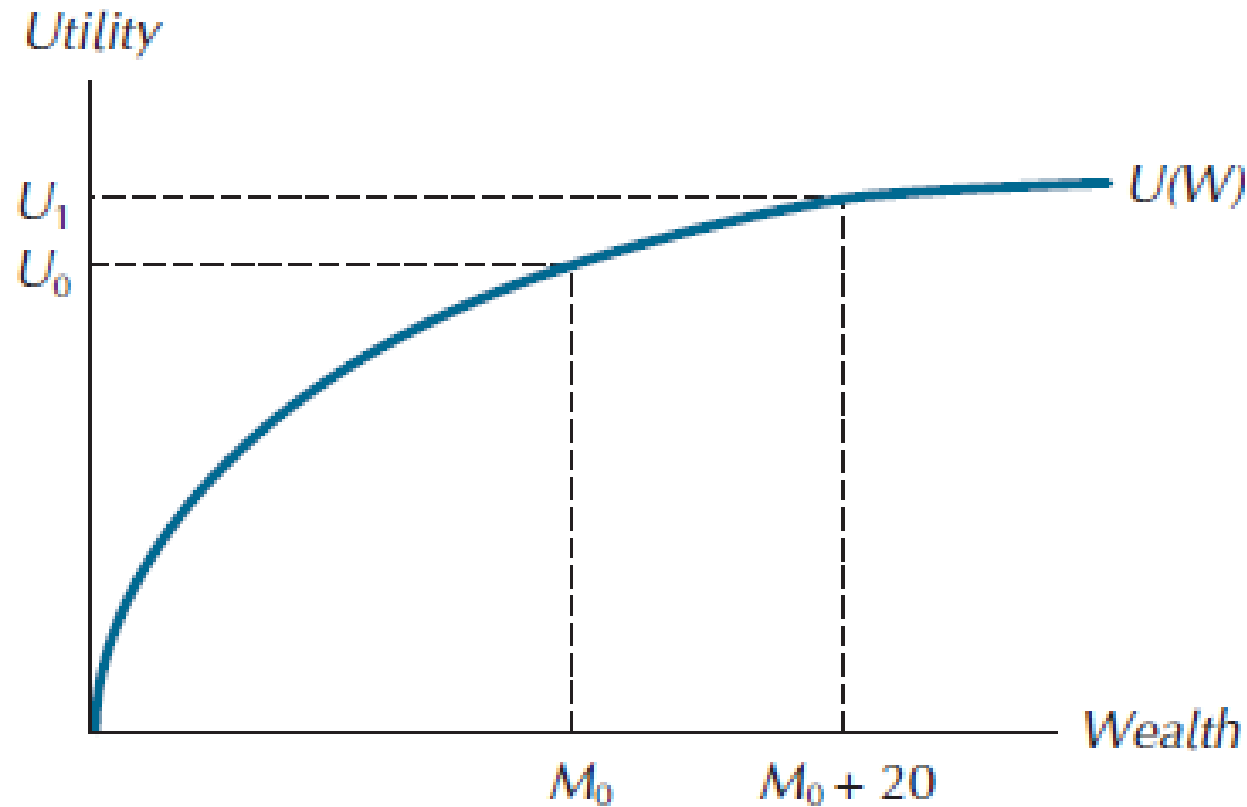


Figure 7.7: Utility of a Pair of Events That Increases Total Wealth



Two Properties of the Value Function

1. People treat gains and losses asymmetrically, giving the latter much heavier weight in their decisions than the former.
 - Does not necessarily imply irrational behavior.
2. People evaluate events first and then add the separate values together.

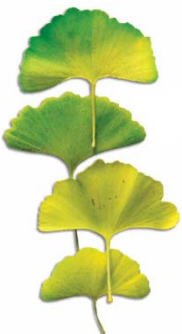


Figure 7.8: The Kahneman-Tversky Value Function

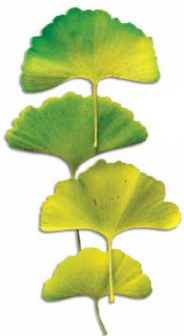
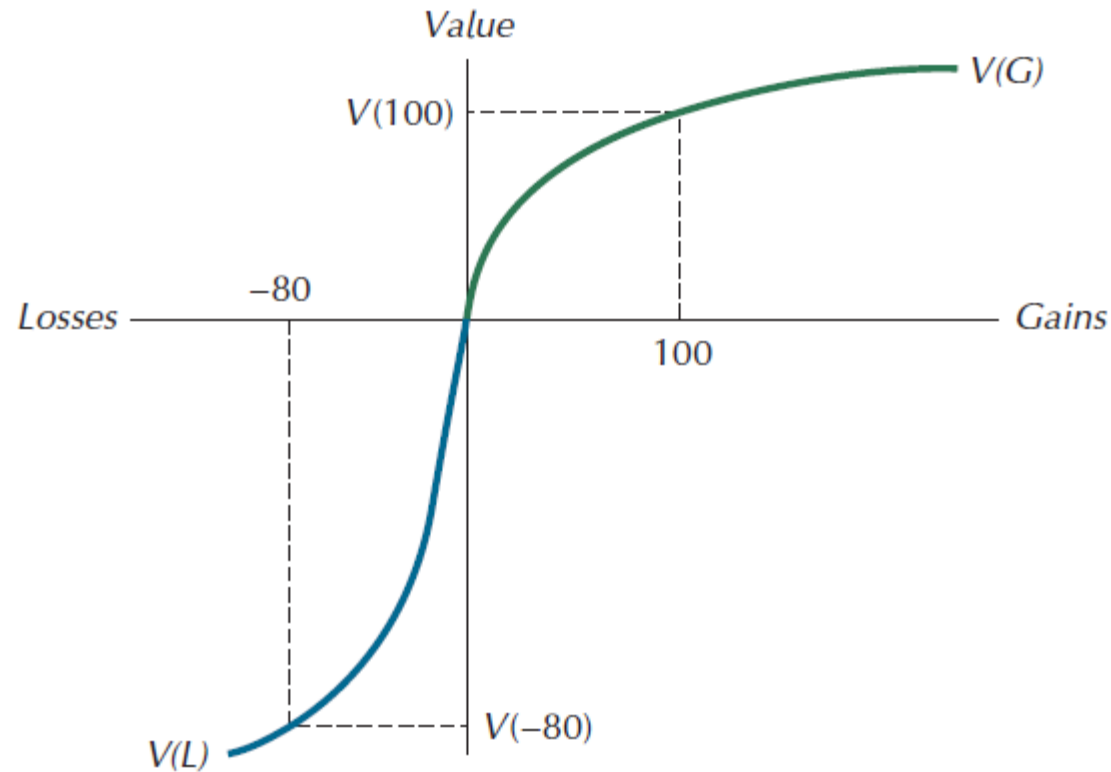
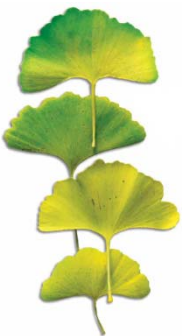
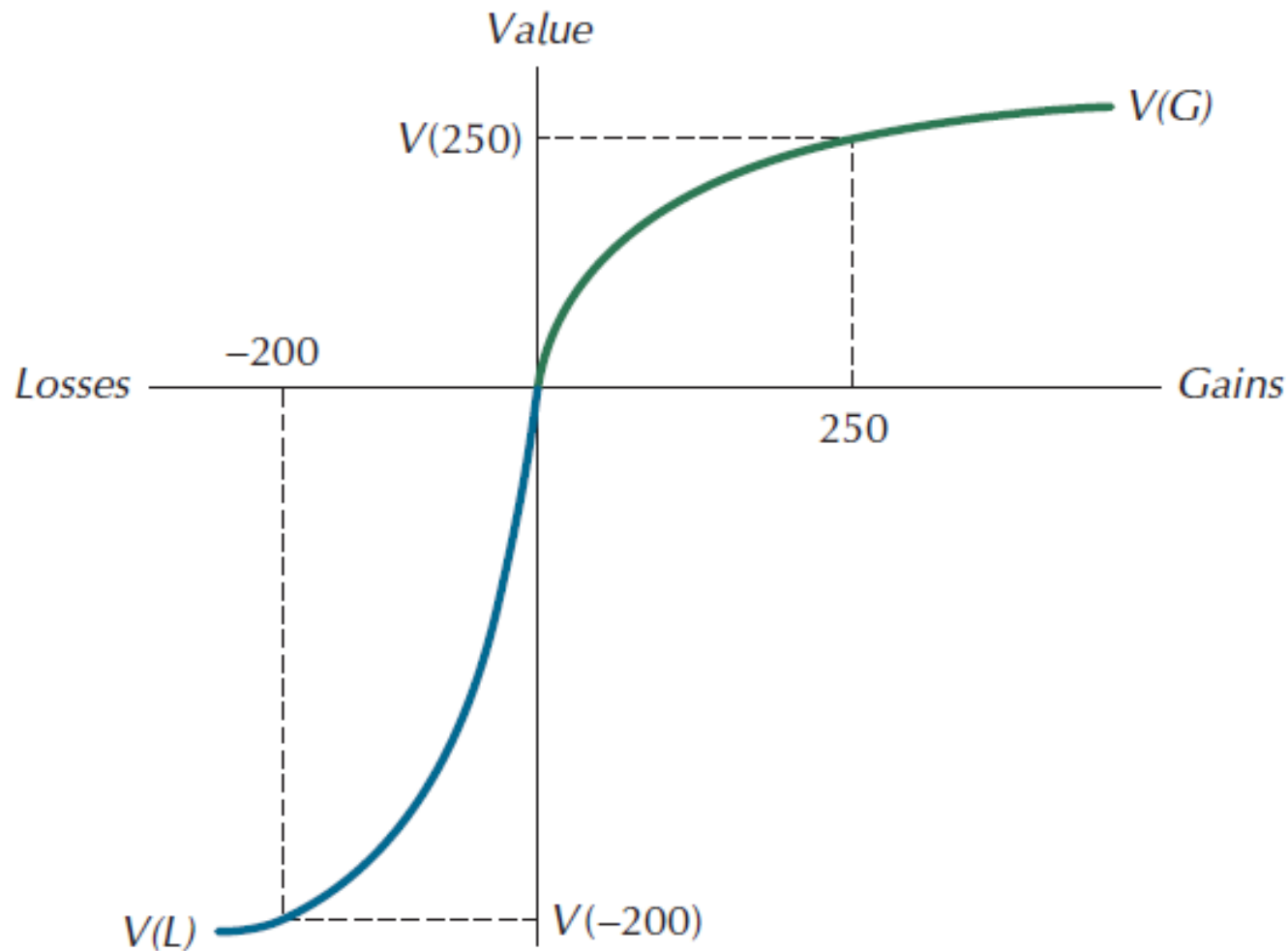
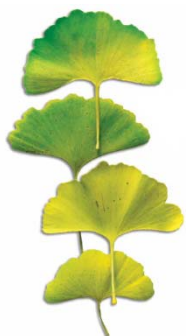


Figure 7.9: Rejection of a Dominant Insurance Plan



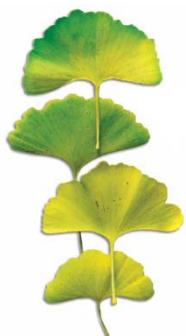
Sunk Costs

- ***Thought Experiment:*** imagine that you have bought a pair of fashionable shoes for \$600, only to discover that they are painfully tight. They improve slightly after being broken in, but still cause considerable discomfort.
- Question: Do you continue wearing these shoes or give them away?
 - Would your response be any different if you had not bought the shoes but instead had received them as a gift?



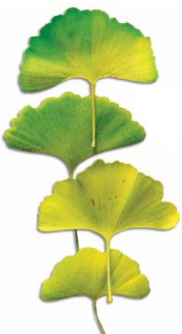
Sunk Costs

- ***Thought Experiment:*** you have just paid \$40 for tickets to a basketball game to be played tonight in an arena 60 miles north of your home. Suddenly it starts snowing heavily and the roads north, while passable, are difficult.
 - Question: Do you still go to the game?
 - Would your answer have been different if, instead of having bought the tickets, you had received them for free?



Affective Forecasting Errors

- ***Thought Experiment:*** a man is trying to decide whether to trade in his Toyota Corolla for a new Porsche Boxster. He could meet the payments on the new car by working an additional Saturday each month, which in his case would mean not spending that Saturday with friends.
- Question: how should he choose between the two cars?
 - What would be the prediction of the Rational Choice Model?



Affective Forecasting Errors

- ***Thought Experiment:*** you are deciding between two different consumption profiles that could be financed from the same stream of lifetime earnings. In each case you and all others in your age cohort will earn a salary of \$50,000 each and every year from age 21 until retirement at age 65. Two possibilities:
 - You and the others spend exactly your salaries of \$50,000 each year.
 - You and the others start out by saving \$10,000 a year, then gradually diminish your rate of saving until, by middle age, you begin drawing down your savings in ever larger amounts to finance additional consumption.

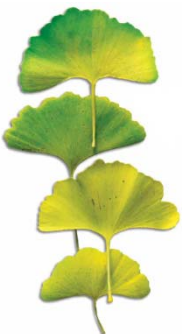
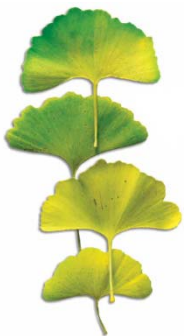
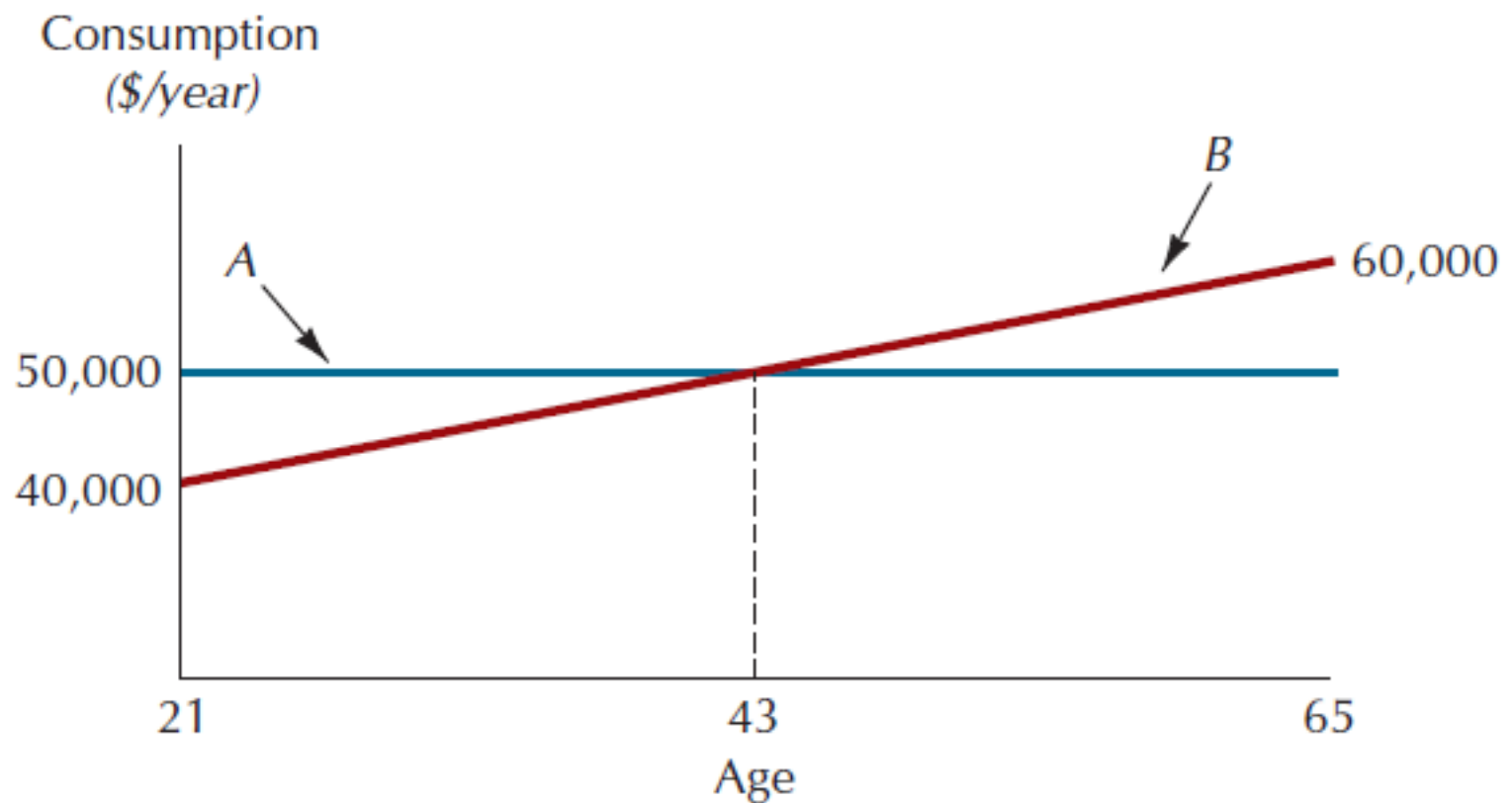


Figure 7.10: Static and Rising Consumption Profiles



Judgmental Heuristics And Biases

- Three simple heuristics that people use to make judgments and inferences about the environment:
 - **AVAILABILITY** - much easier to recall events that are more “available” in memory.
 - **REPRESENTATIVENESS**
 - **ANCHORING AND ADJUSTMENT** -people first choose a preliminary estimate and then adjust it in accordance with whatever additional information they have that appears relevant.

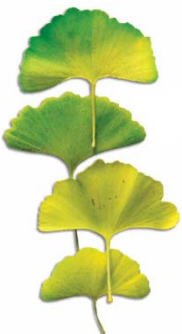
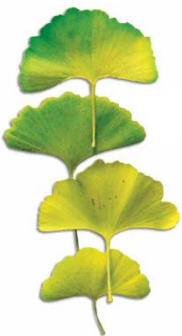
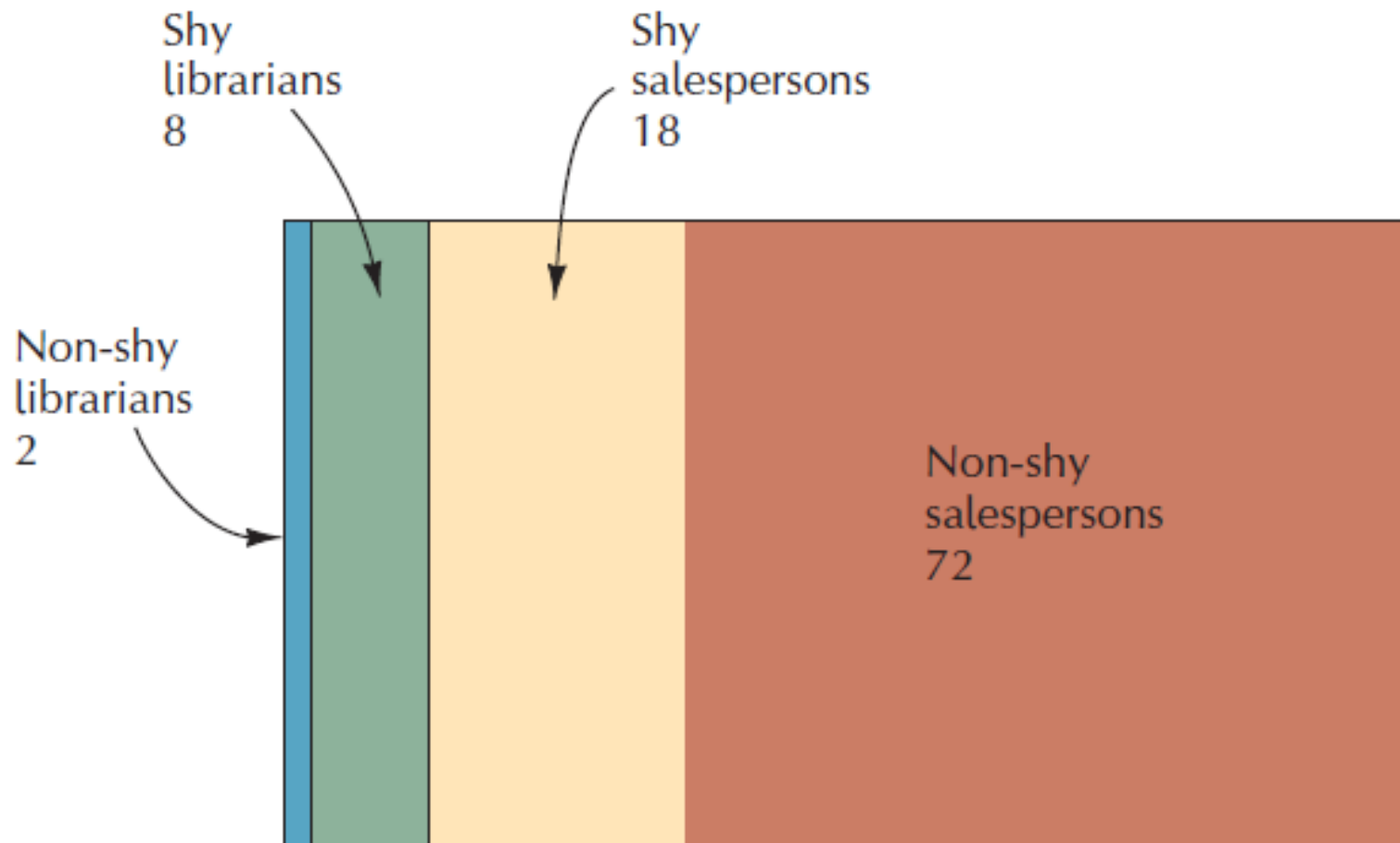
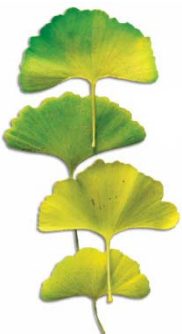


Figure 7:11: Distribution by Type of Librarians and Salespersons



The Psychophysics Of Perception

- ***Weber-Fechner law***: the property of perception whereby the just noticeable difference in a stimulus tends to be proportioned to the value of the stimulus.



The Difficulty Of Actually Deciding

- For many pairs of alternatives utility functions just don't seem to assign clear, unambiguous preference rankings.
 - Difficulty is most pronounced when the alternatives differ along dimensions that are hard to compare.

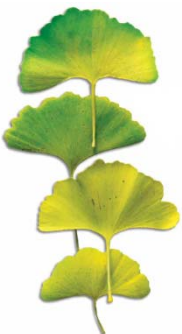


Figure 7.12: Choosing between Two Apartments

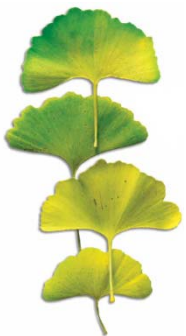
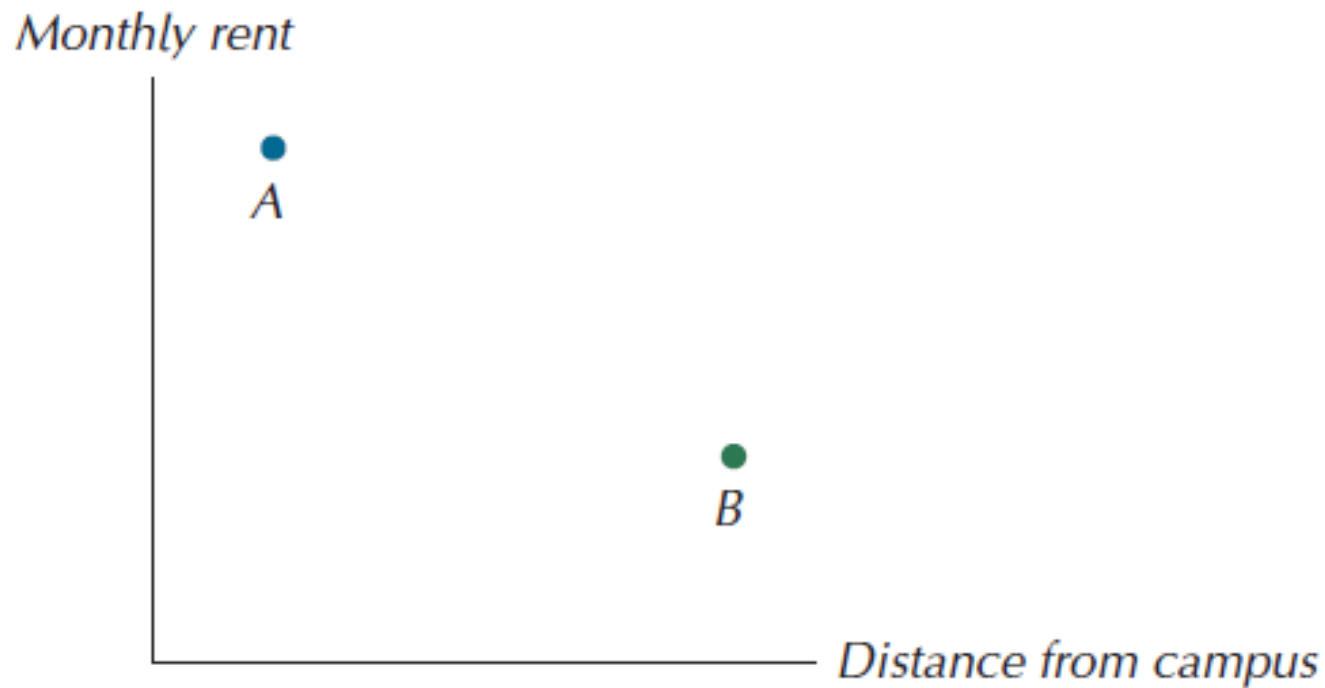
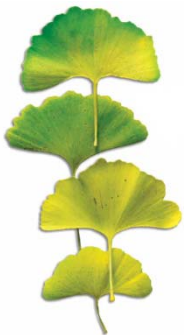
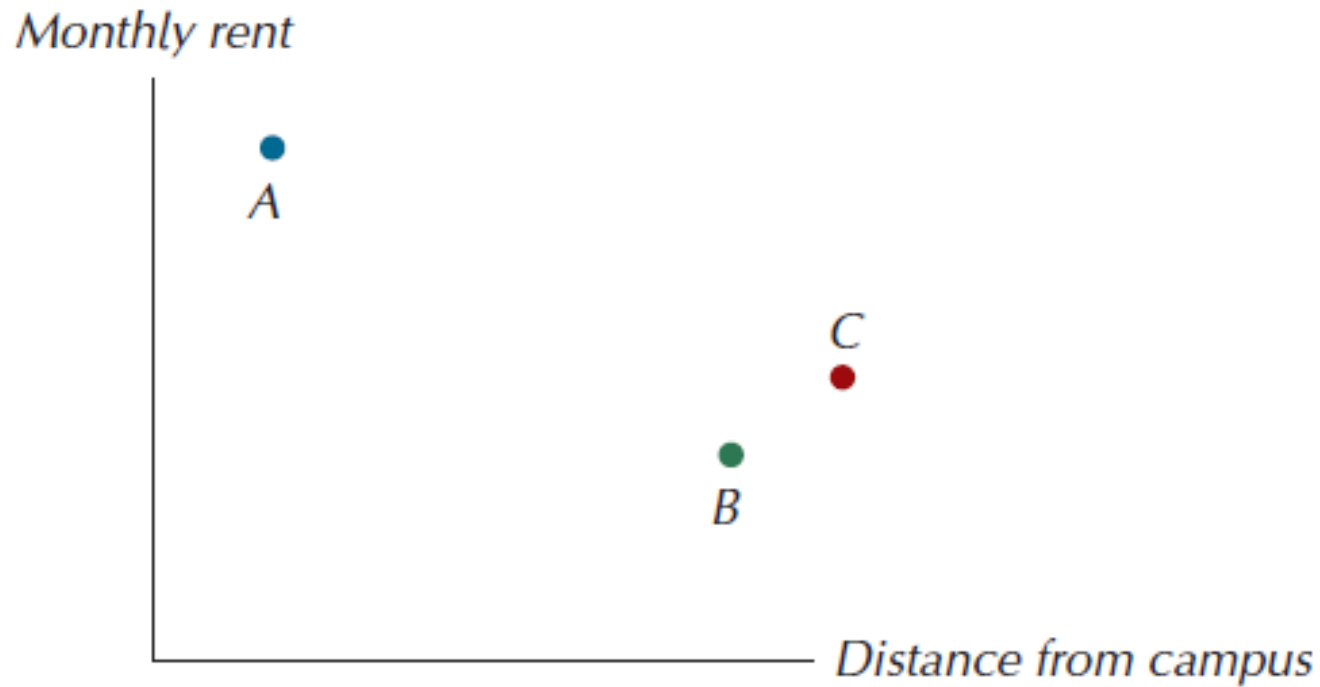


Figure 7:13: Adding an Irrelevant Alternative



The Self-Control Pitfall

- People often have difficulty carrying out plans they believe to be in their own interests.
- Examples of commitment devices:
 - “Christmas clubs” - special accounts that prohibit withdrawals until late autumn
 - Whole-life insurance policies

